

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:)	Examiner: Nguyen, Kimnhung T.
ORNER, Edward E. <i>et al.</i>)	Group Art Unit: 2629
Serial No.: 10/761,152)	Confirmation No: 2560
Filed: 20 January 2004)	Atty. Docket No.: POLY32
Title: INTERACTIVE DISPLAY SYSTEMS)	Customer No.: 06980

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF	Atlanta, GA 30308
Honorable Commissioner for Patents	23 December 2009
P.O. Box 1450	
Alexandria, VA 22313-1450	

Honorable Sir:

Applicant respectfully requests review of the *Final Office Action* (“FOA”) issued 24 June 2009 in this Application. No amendments are being filed with this *Pre-Appeal Brief Request for Review* (“Request”). This *Request* is being filed together with a *Notice of Appeal*, pursuant to 37 C.F.R. § 1.91(1), and a *Request for Extension of Time* for three months with accompanying fees.

1. Overview

Claims 1-2, 4-17, 19, and 75-77 are pending in the Application. By the FOA, all pending claims are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over various combinations of U.S. Pat. App. 2003/0196980 to Ahn, U.S.P.N. 6,902,074 to Albrecht, U.S. Pat. App. 2003/0206164 to Juenger, U.S.P.N. 5,300,943 to Jakobs et al., and U.S. Pat. App. 2003/0001825 to Omura et al. Applicant respectfully disagrees with the Examiner’s rejections.

2. Summary

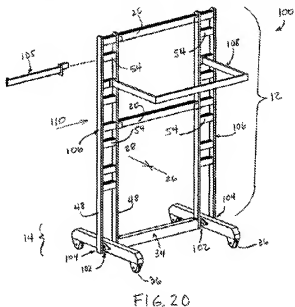
Contrary to the Examiner’s allegations throughout the FOA, the claimed invention is non-obvious over the cited combination. The following features are neither disclosed by, nor obvious over, the cited combinations: (1) a positioning element “counterbalance[ing] weight of the interactive display by applying an upward force to counteract a downward force ..., thereby allowing for ... vertical adjustment”; and (2) a positioning assembly “enabling positioning of the interactive display ... between the bottom height and the top height, wherein the interactive display is positionable at any height between the bottom height and the top height.”

3. It is not obvious to modify the cited combinations with counterbalancing that allows vertical adjustment.

Independent Claims 1 and 77 recite a positioning element or positioning assembly for “counterbalance[ing] weight of the interactive display by applying an upward force to counteract

a downward force of the interactive display, thereby allowing for ... vertical adjustment of the interactive display with an upward repositioning force of less than about 25 pounds.” This recited feature is non-obvious over the cited combinations.

The Examiner admits that Ahn fails to disclose this feature, and further, the Examiner does not assert that any references of the cited combination disclose or suggest these features. Rather, the Examiner alleges that it would be obvious to modify Ahn with the claimed counterbalancing to allow vertical readjustment. 6/24/09 FOA, p. 3. Applicant respectfully submits, however, that it is physically impossible to modify Ahn in this manner without impermissibly changing the principal of operation of Ahn. See MPEP § 2143.01 (VI).



As illustrated in FIG. 20 of Ahn, which is reproduced above, a mounting apparatus of Ahn comprises stationary support ladders 106. Ahn, ¶71. Each ladder 106 has cross-braces 54, or ladder rungs, positioned at predetermined discrete positions along the height of the ladder 106. Id. Connecting devices 105 and 108 are mounted on the rungs 54, and various items may be displayed on the connecting devices 105 and 108. Id. To relocate a displayed object from a first height to a second height, a user disconnects a connecting device 105 or 108 from a first rung 54 at the first height, and then reconnects the connecting device 105 or 108 to a second rung at the second height. In other words, to vertically adjust an object displayed on the mount, one must remove the object from the mount and then replace the object in a new position on the mount.

While the Ahn mount applies an upward force to an object in order to keep the object positioned above the ground, that upward force is not counterbalancing that “allow[s] for ... vertical adjustment of the interactive display,” as recited in Claims 1 and 77. The upward force applied by the Ahn mount is sufficient only to maintain a displayed object in a *stationary*

position above the ground. In other words, as the Examiner admits, Ahn fails to disclose counterbalancing to allow for vertical adjustment of the display.

Further, and contrary to the Examiner's allegations, Ahn cannot be modified with the claimed counterbalancing. According to the laws of physics, lifting an object upward (i.e., vertically adjusting the object) requires application of a force greater than the force applied downward by the object. According to Ahn, a user must bear this entire force without the assistance of the mount, because the displayed object must be removed from the mount during vertical adjustment. In contrast, the claimed invention bears a portion of this adjustment force by counterbalancing during vertical adjustment to allow readjustment with an upward repositioning force of less than about 25 pounds. Counterbalancing to assist in vertical adjustment occurs when a mount provides an upward force *during* that readjustment, wherein that upward force lessens the user's readjustment force. In the claimed invention, as a result of counterbalancing provided by the mount, the upward force required by the user is less than about 25 pounds.

Modifying Ahn with the feature of counterbalancing to allow vertical adjustment with an upward repositioning force of less than about 25 pounds would require changing Ahn so that the Ahn mount continues to support the displayed object during upward repositioning. This is directly contrary to the basic operation of the Ahn mount, which requires disconnection of a displayed object for vertical readjustment. Therefore, to provide such a feature in the mount of Ahn is impossible without impermissibly changing a principal of operation of Ahn. See MPEP § 2143.01 (VI).

Accordingly, it is not obvious to modify the cited combinations by incorporating this recited feature of Claims 1 and 77.

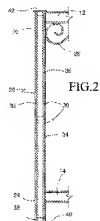
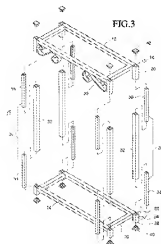
4. The cited references fail to disclose a positioning assembly for positioning the interactive display at any height between a bottom height and a top height.

Independent Claims 75 and 77 recite a "positioning assembly enabling positioning of the interactive display ... *at any height* between the bottom height and the top height." Claim 75 further discloses that the interactive display is positionable "in a *continuous range*." These features are not disclosed by, or obvious over, the cited combinations.

The Examiner alleges that the cited combinations, specifically Albrecht, disclose the features recited in Claims 75 and 77. 6/24/09 FOA, pp. 4-5. Contrary to the Examiner's allegation, Albrecht does not disclose this recited feature. Although the elements of the support stand of Albrecht are slidable for assembly of the stand, the slidability is for assembly purposes only and does not enable adjustability of the support stand. The support stand can be assembled into only a single, predetermined, non-adjustable configuration. As a result, a displayed object

can be positioned on the stand at only one predetermined height.

Albrecht discloses a knock-down support stand for supporting heavy objects, such as an aquarium. Albrecht, 1:45-49. The support stand is comprised of various components that slide together to form double-tubed sections. Albrecht, 1:49-54. A pair of first and second elements of the support stand interconnects by sliding an inner tubing section of the first element into an outer tubing section of the second element. Id. The result is a pair of inter-connected elements forming a double-tubed section. Id.



The various disassembled components of the Albrecht support stand are illustrated in FIG. 3, reproduced above, and a double-tubed section of the assembled stand is illustrated in FIG. 2, also reproduced above. As described in Albrecht:

To assemble the stand 10, the inner sleeve sections 34 of the support legs 28 are inserted into the vertical hollow sleeves 24 of the lower frame 14 *until they contact the floor or other support surface*. Next, the outer sleeves 32 of the support legs 28 are slid over the inner sleeve sections 34 *until they abut the top ends of the lower frame vertical sleeves 24*. The second group of inner sleeve sections 36 are next slid into the outer sleeves 32 *until they engage the top ends of the first group of inner sleeve sections 34*. Finally, the upper frame 12 is mounted in the exposed upper ends of the inner sleeve sections 36 *so that the vertical hollow sleeves 20 engage the top ends of the support leg outer sleeves 32*. A corresponding one of a plurality of plastic caps or the like 42 is then preferably inserted into each of the open top ends of the vertical sleeves 20 on the upper frame 12. (Albrecht, 3:17-32, *emphasis added*.)

As described and illustrated above, various elements of the support stand slide into their predetermined ultimate positions, which are the positions in which they collide with other components and can slide no further. Id. After assembly, components of the stand are locked into place by plastic caps. Id. FIG. 2 illustrates an assembled leg of the stand, in which the stand components are fixed together in unmoving, non-adjustable positions. As shown in FIG. 2, each

outer element abuts adjacent outer elements. Similarly, although not visible, each inner element abuts adjacent inner elements. After the support stand is assembled, the various components of the support stand are immobile and non-adjustable during use. The support stand of Albrecht can be assembled into only a single, predetermined, non-adjustable configuration, so that the height of a displayed object positioned on the stand is fixed and predetermined by the immobile positions of the assembled stand components. Therefore, contrary to the Examiner's allegations, Albrecht fails to disclose the recitation of positioning the interactive display at any height between a bottom height and a top height. Instead, only a single positioning height can be achieved with the Albrecht support stand. The cited combinations also fail to disclose allowing positioning in a "continuous range," as recited in Claim 75.

Further, Albrecht cannot be modified to provide adjustability. Albrecht discloses that "the stand is very sturdy by virtue of the double walled construction of the support legs in which the inner sleeves run the full lengths of the legs and the frame hollow sleeves." Albrecht, 2:9-11. Modifying Albrecht by allowing various inner and outer sections to slide for adjustability purposes would result in the inner sleeves no longer "run[ning] the full lengths of the legs and the frame hollow sleeves." Such a modification would cause the support stand to lose its sturdiness and ability to support very heavy objects, such as aquariums. As a result, the modified support stand would be unsatisfactory for its intended purpose, so Albrecht cannot be modified in this manner. See MPEP § 2143.01(V).

Accordingly, for at least the above reasons, Applicant respectfully submits that independent Claims 75 and 77 are patentable over the cited combinations.

5. Applicant's dependent claims are patentable over the cited combinations

Applicant's dependent claims, Claims 2, 4-17, 19, and 76, are patentable over the cited combinations at least by virtue of their dependence on Applicant's independent claims, which are distinguishable over the cited combinations as described above.

6. Conclusion

For at least the reasons stated above, Applicant respectfully requests that all rejections be withdrawn and that this Application be allowed in a timely manner.

Respectfully submitted,
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